

Centre for Lean Projects NOTTINGHAM TRENT UNIVERSITY

Make Ready Planning Using Flow Walks

Christine Pasquire & Paul Ebbs





+/ A & Takeaways

+ = what was good about today?

= delta – what could be better?

Takeaway = what did you learn in 12 words or less









Introductions

name

company & role

years' experience

why did you come to this training session?









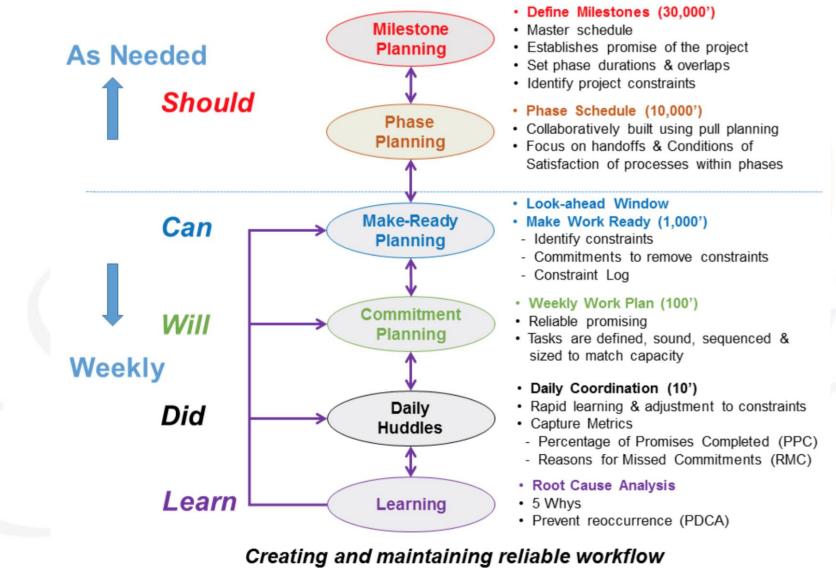
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Creating and maintaining reliable workflow

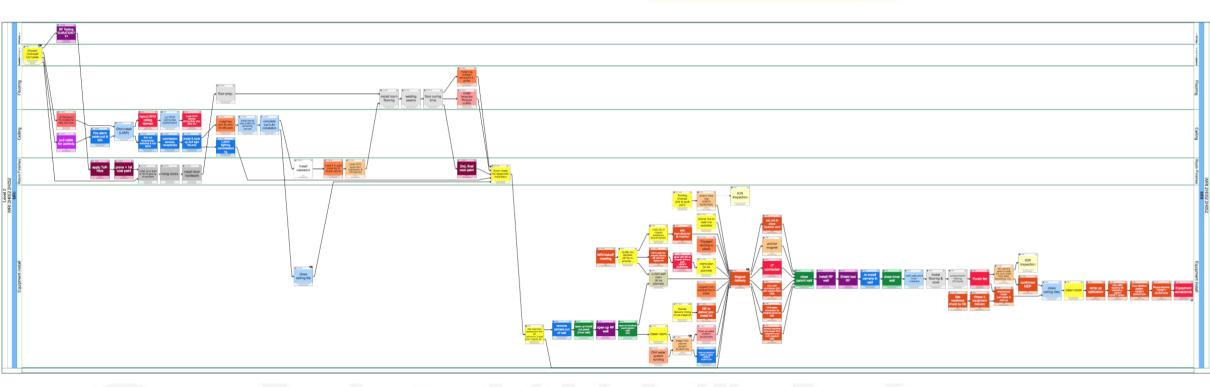




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Last Planner[®] System Phase/Collaborative Planning







ummit





Creating and maintaining reliable workflow





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Creating and maintaining reliable workflow





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- Look-ahead Window
- Make Work Ready (1,000')
- Identify constraints
- Commitments to remove constraints
- Constraint Log







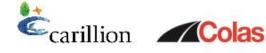




What? Why? When? Where? How? Who?

Look-ahead Window

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What? – Identify constraints Why? – To create **reliable** work flow When? – Master plan, pull plan and weekly Where? – In a dedicated room How? – Collaborative exercise "at the wall" Who? – Last Planners and stakeholders









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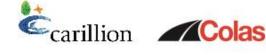




Flow Walk – Round 1 Identify Constraints

The 8 Flows of Lean Project Delivery

- **1. Information**
- 2. Equipment
- 3. Materials
- 4. People
- 5. Prior Activity
- 6. External Conditions
- 7. Safe Space
 - 1. Head
 - 2. Physical
 - 3. Time
- 8. Understanding









Flow Walk – Round 2 Sort and Categorize each Flow

1. Group similar constraints together

- 2. Name the new category on diamond tag
- 3. Add additional flows to any constraint



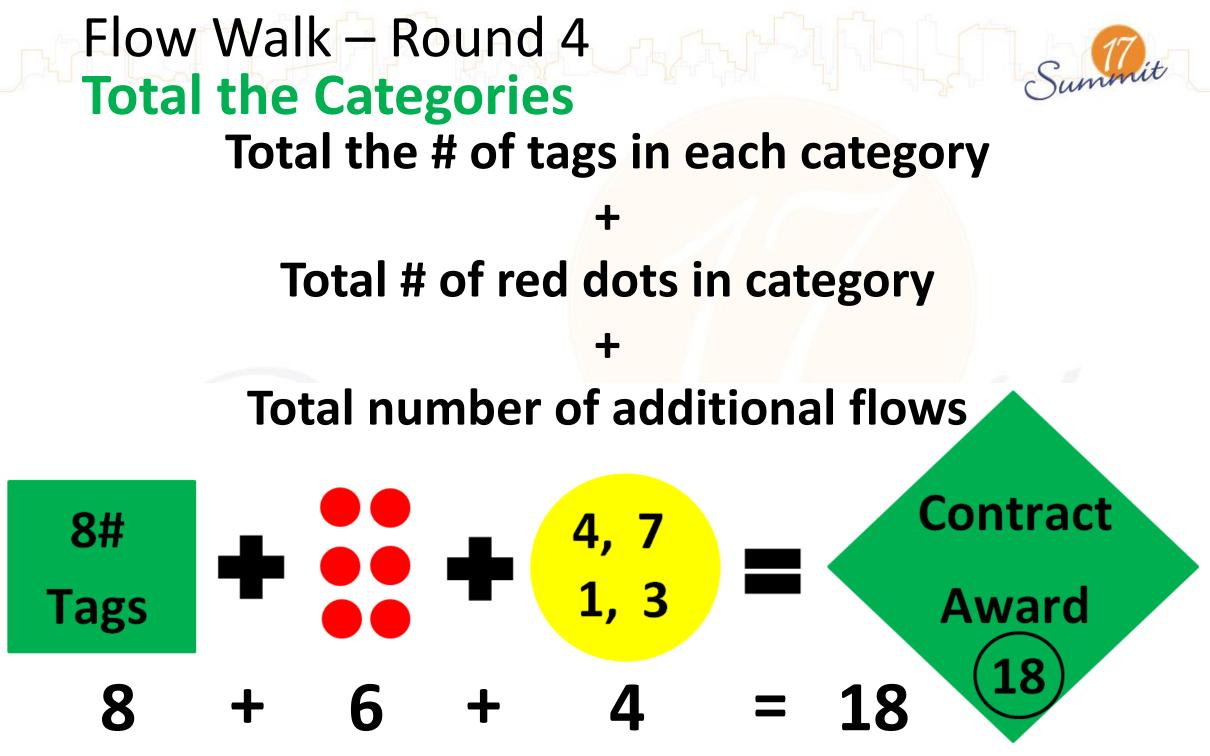




Place two red dots on the constraint(s) you perceive to have the biggest Level of Impact (LOI) on the flow of this project

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Flow Walk – Round 5 Linking to Make Ready Planning



- 1. Bring all the diamonds to the wall
- 2. Combine similar categories & rename group
- 3. Total each new group









Context









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Flow Walk – Round 1 Identify Constraints

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8 Flow constraint identification: what will stop or disrupt the flow of this project in relation to the named flow below?

ormation - Blue .g. RFIs	Equipment - Pink	Materials - Light Blue • E.g. material specification	People - Yellow • E.o. signatures/appr	ovals, availability of labour
9.1112		L.g. material specification	c.g. signaturestappi	overs, availability of labour
What will stor	o or disrupt the flow	w of this project ir	n relation to	each flow?
		Materials		
Information				
			P	eople
	Equipment			•
or Work - Green g. RAMS	Ext. Conditions - Red • E.g. contract award	Shared Understanding - Purple • E.g. Next customer requirements	Space – Orange Head	Time Physical
	-L.g. contract award	- L.g. Next customer requirements	neau	nine Priysical
		Shared Understa	nding	
Determined				
Prior Work				
				Space
			Head/	Time/Physical
	External Conditio	ns	incut/	

-

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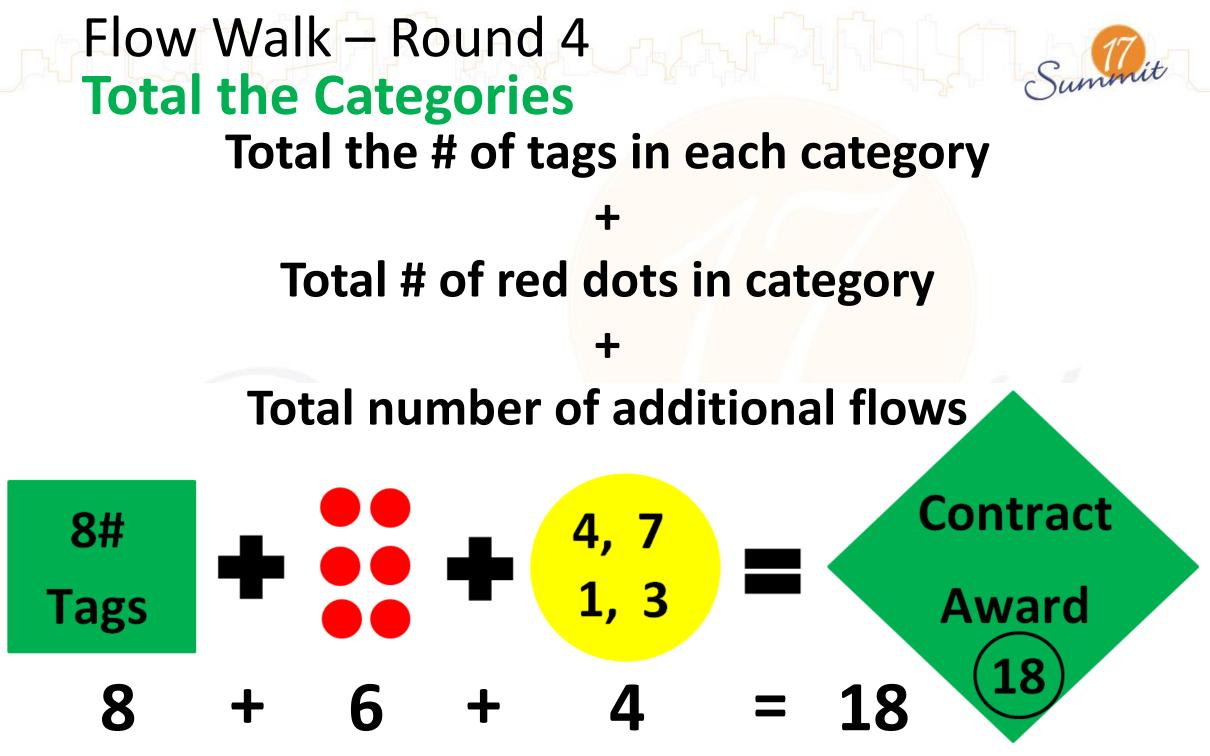




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Discussion and Q&A Owner & Construction Partner Perspectives

How did the Flow Walk process benefit the planning process?

How will they be used in the future?

What is different about the flow walks to traditional risk identification?

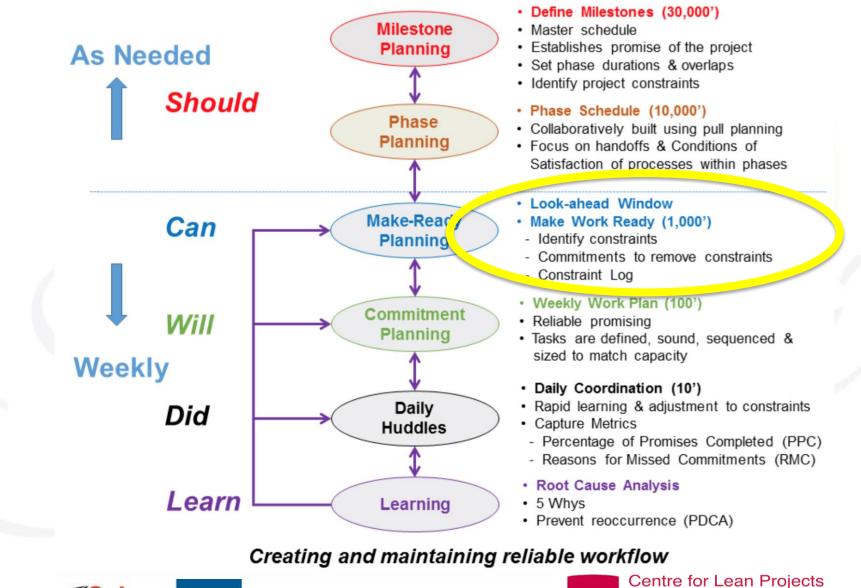
Opportunity for Q&A from the attendees to Peter and Rachel











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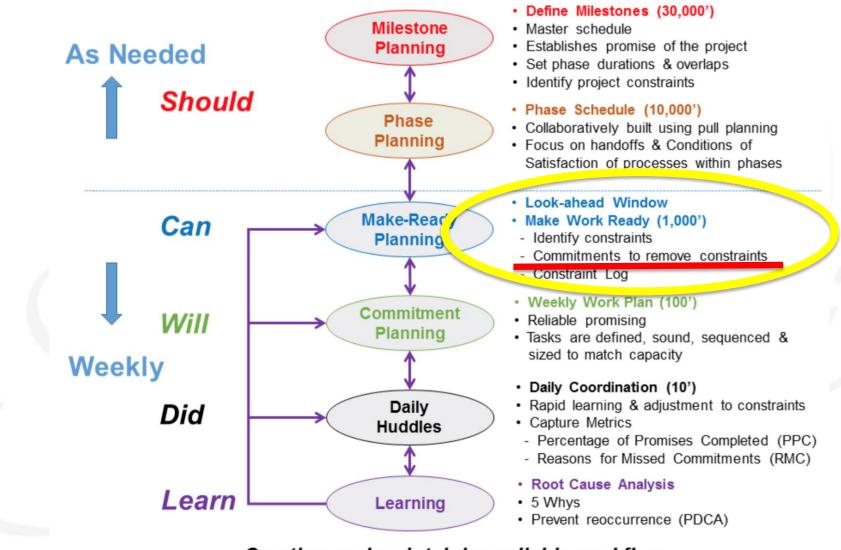






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Creating and maintaining reliable workflow





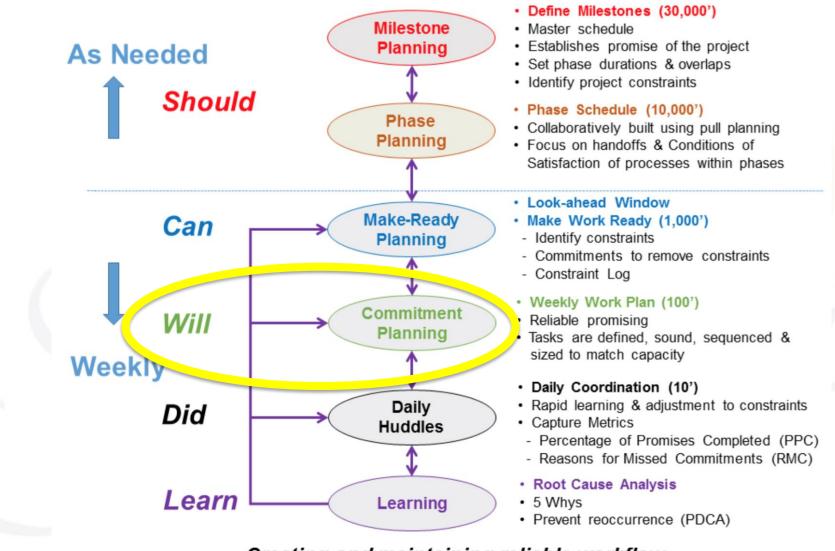
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Creating and maintaining reliable workflow





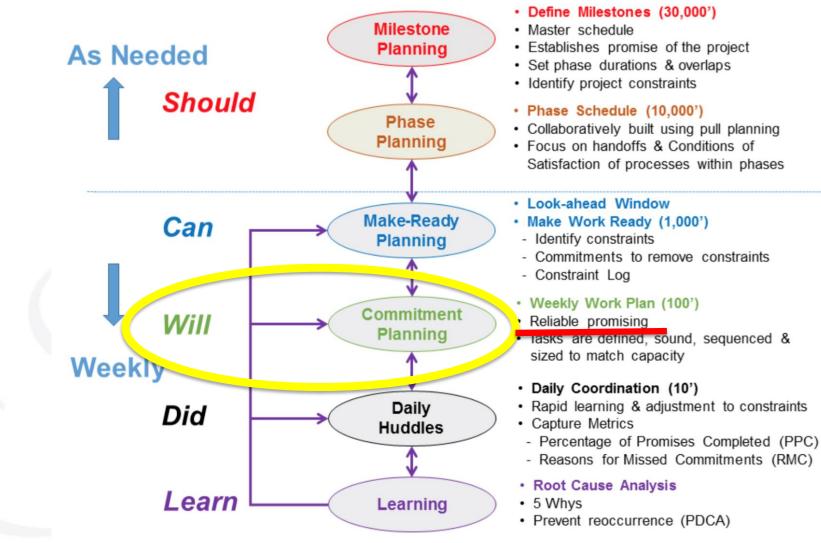
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And finally.....

Lean construction research seeks practical and applied solutions.

Working with a University has many benefits:

- objective, unbiased (not a conduit to "the bosses")
- access to global knowledge and expertise
- expertise in developing experimental action cycles for performance improvement





